

### **REMARKS/ARGUMENTS**

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

### **SEPARATE PAGES**

In accordance with 37 CFR § 1.173(c), these pages that are separate from the pages containing the claim changes indicate the status, as of the date of this amendment, of all patent claims and all added claims. These separate pages also provide an explanation of the support in the disclosure of the patent for the changes made to the claims.

### **CLAIM STATUS**

Claims 1-18 and 33-37 are presented in the present application. Claims 19-32 were previously canceled without prejudice and Claims 33-37 are being added as new dependent claims by the present amendment.

### **EXPLANATION OF CLAIM SUPPORT**

New Claims 34 and 36 find support in the specification at column 5, lines 52-60 and in Figure 4A, for example, and new Claims 33, 35, and 37 find support in the specification at column 6, lines 29-33 and in Figure 5, for example. Accordingly, no new matter has been added.

### **OUTSTANDING ACTION SUMMARY**

The outstanding Official Action presented an objection to the reissue declaration filed September 13, 2004, and a rejection of Claims 1-18 under 35 U.S.C. § 251 as being based on a defective reissue declaration.

In accordance with the suggestion in the paragraph bridging pages 2 and 3 of the outstanding Action, a new declaration is submitted herewith that adds the suggested statement that the original patent is wholly or partly inoperative or invalid because the patentees claimed more than they had a right to claim, as evidenced by the additional limitations of “wherein the irradiating impurity ions is performed to form a junction structure comprising a vertical junction group where a first conductivity-type region and the second conductivity-type region are alternatively arranged vertically to a surface of the semiconductor substrate” that has been added to original patent Claims 1, 2, and 12.

### **RESPONSE TO OUTSTANDING ACTION**

Regarding the objection to the reissue declaration filed September 13, 2004, and the rejection of Claims 1-18 under 35 U.S.C. § 251 as being based on a defective reissue declaration, the suggestion in the paragraph bridging pages 2 and 3 of the outstanding Action has been adopted and a new declaration is submitted herewith that adds the suggested statement that the original patent is wholly or partly inoperative or invalid because the patentees claimed more than they had a right to claim, as evidenced by the additional limitations of “wherein the irradiating impurity ions is performed to form a junction structure comprising a vertical junction group where a first conductivity-type region and the second conductivity-type region are alternatively arranged vertically to a surface of the semiconductor substrate” that has been added to original patent Claims 1, 2, and 12. Accordingly, withdrawal of the objection to the reissue declaration filed September 13, 2004, and the rejection of Claims 1-18 under 35 U.S.C. § 251 as being based on a defective reissue declaration is respectfully requested.

In addition, as newly submitted Claims 33-37 depend from independent Claims 1, 2 and 12, which are believed to be allowable as discussed in the previously filed amendment, it is respectfully submitted that new Claims 33-37 are also allowable.

Further in this last regard, it is noted that Komori discloses a semiconductor field effect device in which, as shown in Figure 1E, various ions are irradiated into a substrate 1, which is a p-type substrate, to form an n-type region 5. Komori forms only a single n-type region 5 and not plural n-type regions 5 that are alternatively formed with the p-type substrate 1 as required by new Claims 33, 35, and 37.

Furthermore, Komori does not teach or suggest that the n-type region 5 is formed such that the cross-sectional shape and cross-section area of the first and second conductivity-type regions on planes perpendicular to the direction of irradiation are uniform in the direction of irradiation, as required by new Claims 34 and 36.

Accordingly, it is respectfully submitted that dependent Claims 33-37 clearly patentably distinguish over Komori.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to this effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)

Raymond F. Cardillo, Jr.  
Registration No. 40,440